

Arctic Investigations Program (AIP) Alaska Invasive Bacterial Disease Surveillance Report *Neisseria meningitidis* – 2015

Background

AIP has conducted statewide surveillance of invasive *Neisseria meningitidis* since 2000. Invasive *N. meningitidis* is a reportable condition to the State of Alaska Division of Public Health (DPH). Reports of cases of disease caused by this organism are shared between AIP and DPH.

Population

The population of the State of Alaska in 2015 was 737,625; 144,274 (19%) were Alaska Native people. Source: AK Dept. of Labor & Workforce Development population estimates.

Case Definition

An isolate of *Neisseria meningitidis* from a normally sterile site that has been taken from a resident of Alaska.

Methods

Participating laboratories send isolates recovered from sterile sites to the AIP laboratory in Anchorage; materials and forms for isolate shipment and data collection are provided to each laboratory by AIP. Demographic and clinical information on the cases are collected from a review of medical records. Annually, AIP asks that each laboratory review their records and provide information on any cases that may have been overlooked.

Invasive *Neisseria meningitidis* Cases by Race – Alaska, 2015

| Race | Cases n (%) | Age Adjusted Rate* | % Male | Deaths n (%) |
|---------------|-------------|--------------------|--------|--------------|
| Alaska Native | 1 (25) | 0.8 | 100% | 0 (0) |
| Non-Native | 3 (75) | 0.5 | 0% | 0 (0) |
| Total | 4 | | 67% | 0 (0) |

*Cases per 100,000 per percent distribution of Alaska 2010 population

Invasive *Neisseria meningitidis*, Cases & Rates by Age Group & Race – Alaska, 2015

| Age (years) | Alaska Native | | Non-Native | |
|-------------|---------------|-------|------------|-------|
| | No. Cases | Rate* | No. Cases | Rate* |
| <2 | 0 | 0 | 0 | 0 |
| 2-4 | 0 | 0 | 0 | 0 |
| 5-18 | 0 | 0 | 1 | 0.9 |
| 19-54 | 1 | 1.5 | 2 | 0.7 |
| 55-64 | 0 | 0 | 0 | 0 |
| 65+ | 0 | 0 | 0 | 0 |
| Total | 1 | 0.7 | 3 | 0.5 |

*Cases per 100,000 population

Invasive *Neisseria meningitidis*, Clinical Presentations – Alaska, 2015

| | No. | %* |
|------------|-----|----|
| Meningitis | 3 | 75 |
| Bacteremia | 1 | 25 |

*Percent of cases

Serogroups of Invasive *Neisseria meningitidis* Cases by Race & Age Group – Alaska, 2015

| Race | Age (yrs) | Serogroup | | | | |
|------------|-----------|-----------|---|---|---|---|
| | | A | B | C | W | Y |
| AK Native | <2 | 0 | 0 | 0 | 0 | 0 |
| | 2-18 | 0 | 0 | 0 | 0 | 0 |
| | 19-64 | 0 | 0 | 1 | 0 | 0 |
| | 65+ | 0 | 0 | 0 | 0 | 0 |
| Non-Native | <2 | 0 | 0 | 0 | 0 | 0 |
| | 2-18 | 0 | 0 | 1 | 0 | 0 |
| | 19-64 | 0 | 0 | 2 | 0 | 0 |
| | 65+ | 0 | 0 | 0 | 0 | 0 |

Vaccine Preventable Disease

The quadrivalent meningococcal conjugate vaccine (MenACWY) is recommended for 11-12 year olds with a booster at age 16. One case occurred in the age group for which vaccine is recommended; the child was unvaccinated.